

Title (en)
BRANCHED-BLOCK COPOLYMER PHOTO-CROSSLINKER FUNCTIONALIZED WITH PHOTOREACTIVE GROUPS AND ITS USE FOR SHAPING DEGRADABLE PHOTO-CROSSLINKED ELASTOMERS SUITABLE FOR MEDICAL AND TISSUE-ENGINEERING APPLICATIONS

Title (de)
MIT PHOTOREAKTIVEN GRUPPEN FUNKTIONALISierter VERZWEIGTER BLOCKCOPOLYMER-PHOTOVERNETZER UND DESSEN VERWENDUNG ZUR FORMGEBUNG VON DEGRADIERBAREN, FÜR MEDIZINISCHE UND GEWEBETECHNISCHE ANWENDUNGEN GEEIGNETEN PHOTOVERNETZTEN ELASTOMEREN

Title (fr)
AGENT DE PHOTORÉCULATION DE COPOLYMÈRE SÉQUENCÉ RAMIFIÉ FONCTIONNALISÉ PAR DES GROUPES PHOTORÉACTIFS ET SON UTILISATION POUR LA MISE EN FORME D'ÉLASTOMÈRES PHOTO RÉTICULÉS DÉGRADABLES ADAPTÉS AUX APPLICATIONS MÉDICALES ET D'INGÉNIERIE TISSULAIRE

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Abstract (en)
[origin: EP3680273A1] The present invention relates to novel degradable branched-block copolymers, comprising a star-shaped copolymer central core or a linear copolymer central core, functionalized with photoreactive groups chosen among aryl-azide, (meth)acrylate or thiol groups. The present invention also relates to the use of these degradable branched-block copolymers as photo-crosslinkers to provide degradable photo-crosslinked elastomers as biomaterials suitable for medical and tissue engineering applications. A method for preparing a degradable photo-crosslinked polymer, preferably a degradable photo-crosslinked elastomer, starting from the branched-block copolymer of the invention via a shaping process and an irradiation step is also provided.

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